



TRANS TECH CONSULTANTS

Environmental Compliance Services
Engineers • Geologists • Planners
License # 697833 (A-Haz)

January 17, 2005
Job No. 3034.01

Mr. Jack Tipple
Tipple Motors, Inc.
P.O. Box 855
Ferndale, California 95536

Proposed Site Cleanup
Tipple Motors, Inc., 524 Main Street, Ferndale, California
LOP # 12052

Dear Mr. Tipple:

The purpose of this letter is to address the time frame for cleanup of the site and the submittal of the site for regulatory case closure. In our December 3, 2004 Report, we outlined our recommendations for site cleanup. We have outlined them in the paragraph below. In a December 22, 2004 Letter from Mark Verhey, with Humboldt County HCDHHS-DEH, comment was provided. The letter is attached for reference. The site remediation project would be initiated in early February, provided authorization to proceed is received in January. Initial results should be known by May, with the effectiveness of the system known at that time. The system would be run through the following February. Post remediation monitoring would be performed through April. If the project is a success then we would be submitting for closure in May 2006. In response to specific questions on the level of guarantee I can give, I can only say this. I will consider it to have failed if we are not submitting for closure in 2006. I would not be recommending that you proceed otherwise. As before, the sole source of reimbursement for the project will be the UST Cleanup Fund. We will be directly responsible for all expense financing and payment to all outside suppliers. We are set to proceed and would like to coordinate the work with the work on Mr. Scarbroughs site, saving everyone money. Please let us know at your earliest convenience if you wish to proceed. I hope we have outlined the facts at hand in a manner that is of value to you

Based upon available information, discussions with HCDHHS-DEH staff and onsite observations, it does not appear that water quality objectives will be met in the foreseeable future without aggressive remedial efforts. We therefore recommend that a pilot study be performed, as recommended in our August 2004 CAP. A pilot study work plan should be submitted for HCDHHS-DEH review and approval. The pilot study will also consider a treatment system utilizing the combination of Ozone and hydrogen peroxide injection technologies. The results of the pilot study will be used to design an in situ remediation system to treat the impacted area in consideration of onsite structures and the ongoing site activities.

The analysis results confirm petroleum hydrocarbon impact in shallow soils and groundwater well within the interior of the building footprint. Further, the current data along with previous investigation data indicate that the zone of impact extends not only beneath the office area, but also beneath the garage area.

We appreciate the opportunity to be of service to you and trust this provides the information you require at this time. If you have any questions, or need any additional information, please don't hesitate to contact us at (707) 575-8622 or www.transtechconsultants.com.

Sincerely,

TRANS TECH CONSULTANTS

A handwritten signature in blue ink, appearing to read "B.C. Wiggins", with a long horizontal flourish extending to the right.

Bill C. Wiggins, PE
Registered Civil Engineer

ltyr_3034_01_011705

Attachments: Letter dated December 22, 2005





**Humboldt County Department of Health and Human Services
DIVISION OF ENVIRONMENTAL HEALTH**

100 H Street - Suite 100 - Eureka, CA 95501
Voice: 707-445-6215 - Fax: 707-441-5699 - Toll Free: 800-963-9241
envhealth@co.humboldt.ca.us

received
12-27-04

3034.01

December 22, 2004

Mr. Jerry Lema
524 Main Street
Ferndale, CA 95536

**Subject: Tipple Motors, Inc., 524 Main St., Ferndale, California
LOP # 12052**

Dear Mr. Lema:

Thank you for *Summary Report of Investigation*, prepared by Trans Tech Consultants.

Previous data collected from soil boring numbers three, four, seven, eight, and 14 (SB-3, 4, 7, 8, and 14), in combination with the measured direction of groundwater flow, suggest there may be significant concentrations and mass of hydrocarbons under the existing structures. The recent hand auger boring number 23 (SB-23), located within the office, confirmed this interpretation. The results from SB-23 include 3600 ppm TPHg at a depth of 4.5 feet below ground surface.

The hydrocarbons remaining in soil continue to add mass to the groundwater plume. The rate of degradation of the soil contamination is directly related to the rate of degradation of the groundwater plume. We concur with the recommendation from Trans Tech Consultants to provide a proposal for an in situ (in place) remediation system. We understand ozone injection is the preferred alternative. Please show proposed injection points, specify depth, and determine the anticipated radius of influence.

We recommend sampling ports be installed to evaluate the possibility of fugitive ozone emissions within the existing building. If appropriate, a pilot study may be completed to verify the absence of fugitive ozone and measure the radius of influence.

Please call Mark Verhey at 268-2208 if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mark Verhey".

Mark Verhey
Geologist
Humboldt County Local Oversight Program

MAV: swb

cc: Bill Wiggins, Trans Tech Consultants
Mike Moreland
Jack Tipple
12052.031/158L